

FIG. 1

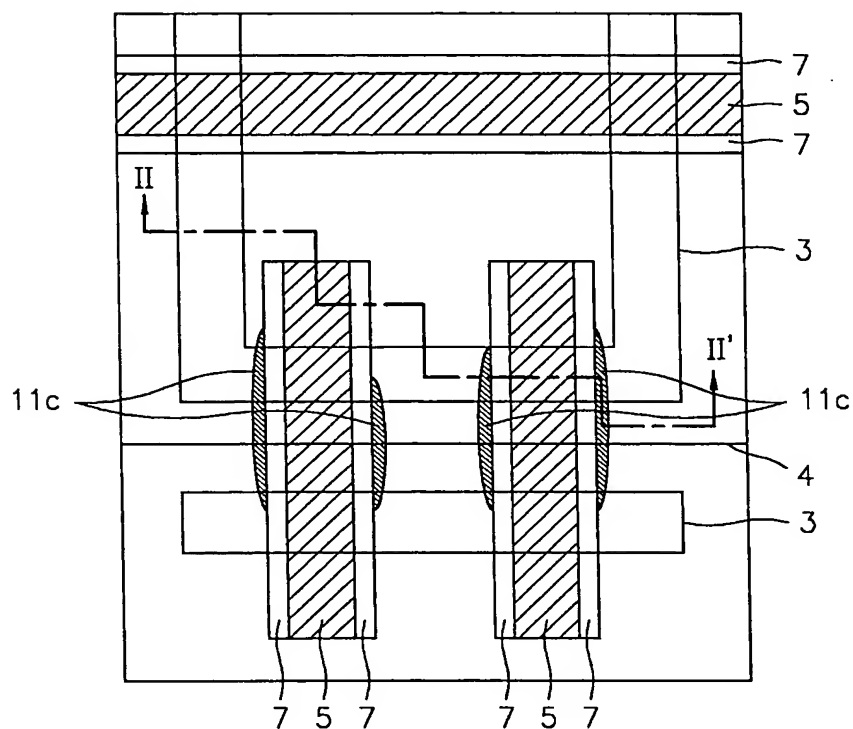


FIG. 2

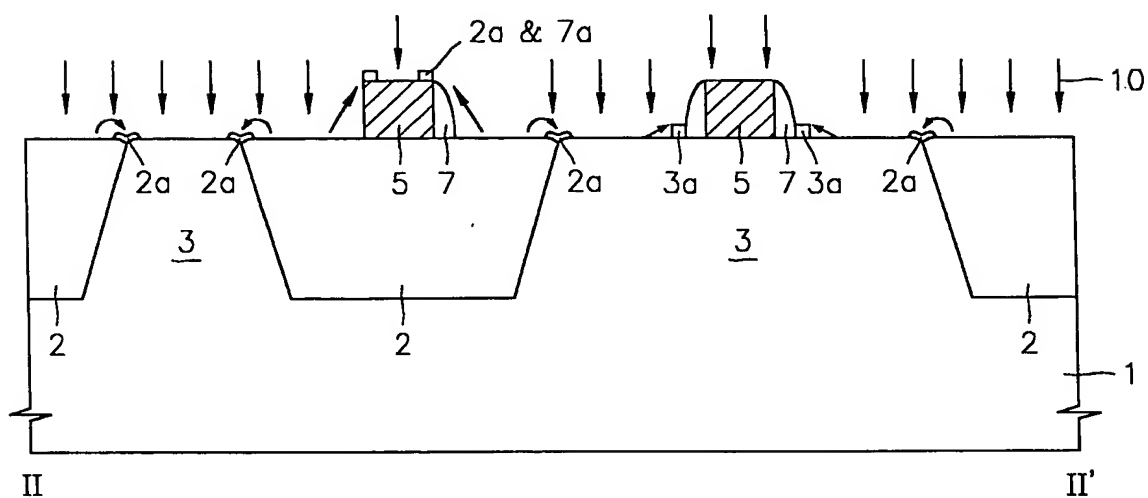
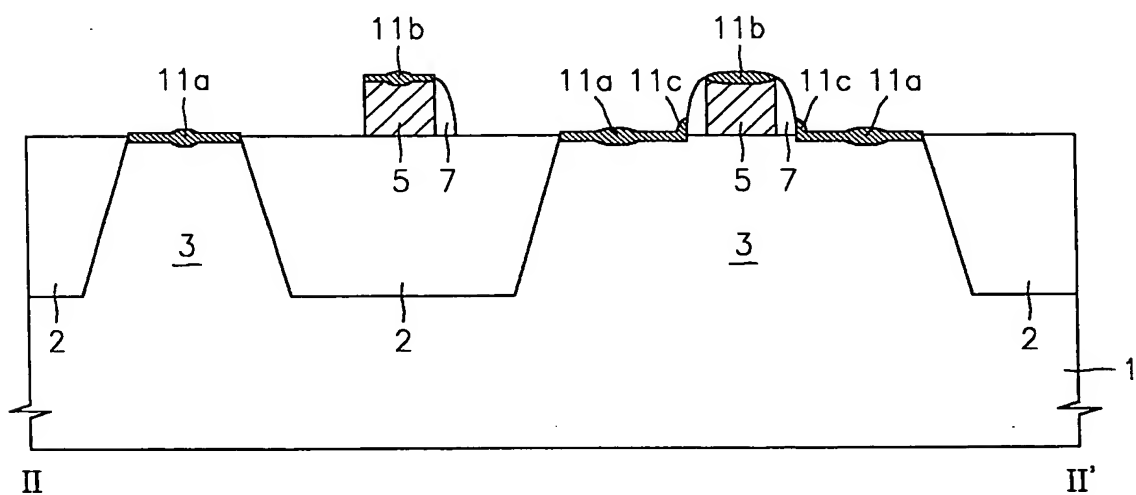


FIG. 3



This cross-sectional view shows a semiconductor device with two active regions, 5a and 5b, separated by a central trench 2. The device is built on a substrate 1. A base layer 3 is present beneath the active regions. Above the base layer, there are layers 7 and 8. Active regions 5a and 5b are formed in the substrate, with 5a having a hatched pattern and 5b having a cross-hatched pattern. Above these regions are layers 11d and 11e, which contain a cross-hatched pattern. The top surface is covered by a layer 13, which is patterned to form contacts or gates. Arrows indicate electrical connections to the substrate 1 and the active regions 5a and 5b.

FIG. 5

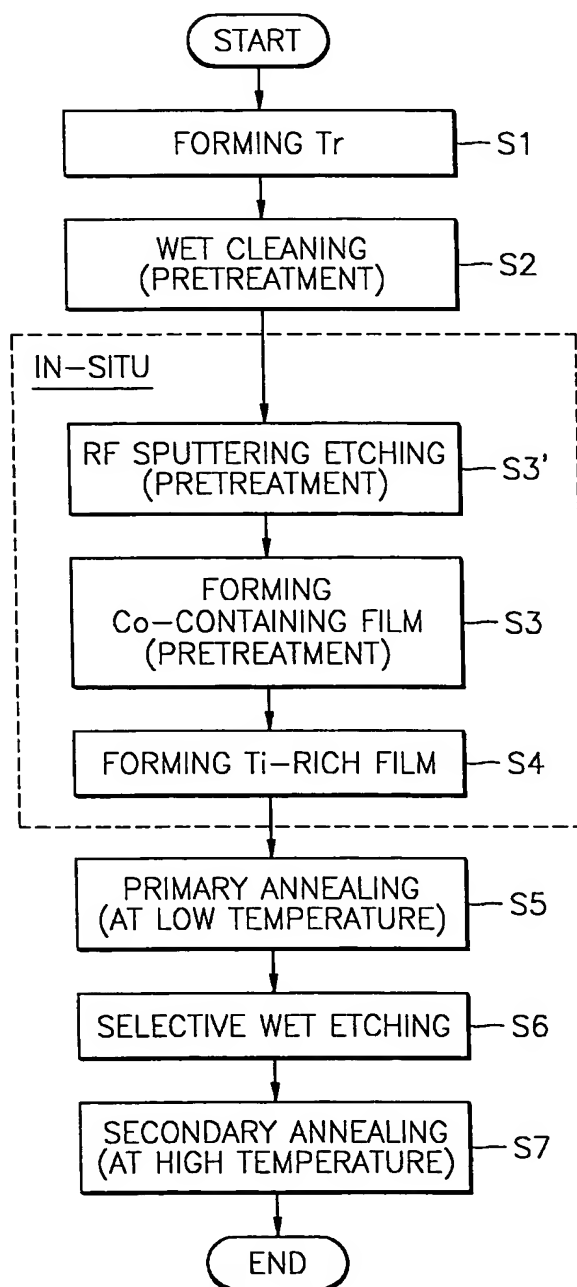


FIG. 6A

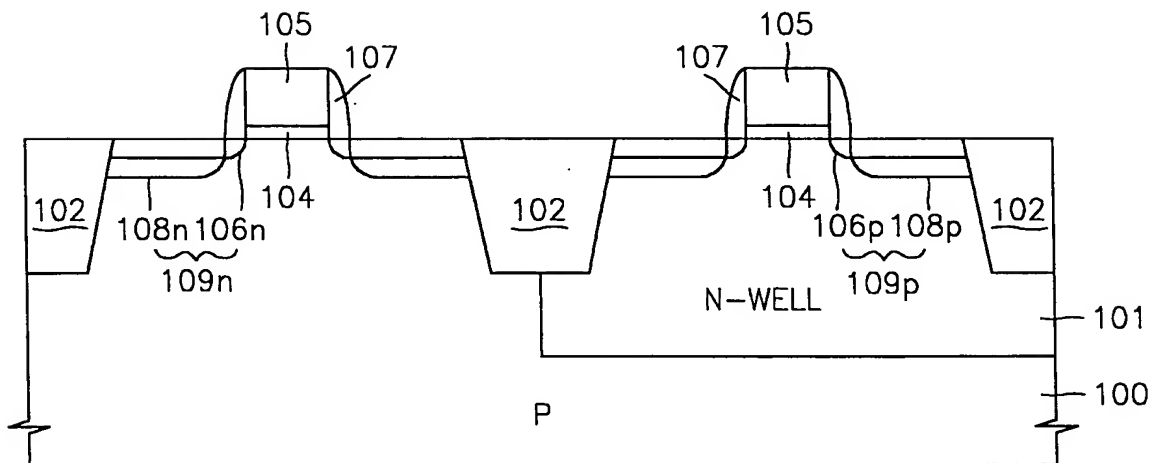


FIG. 6B

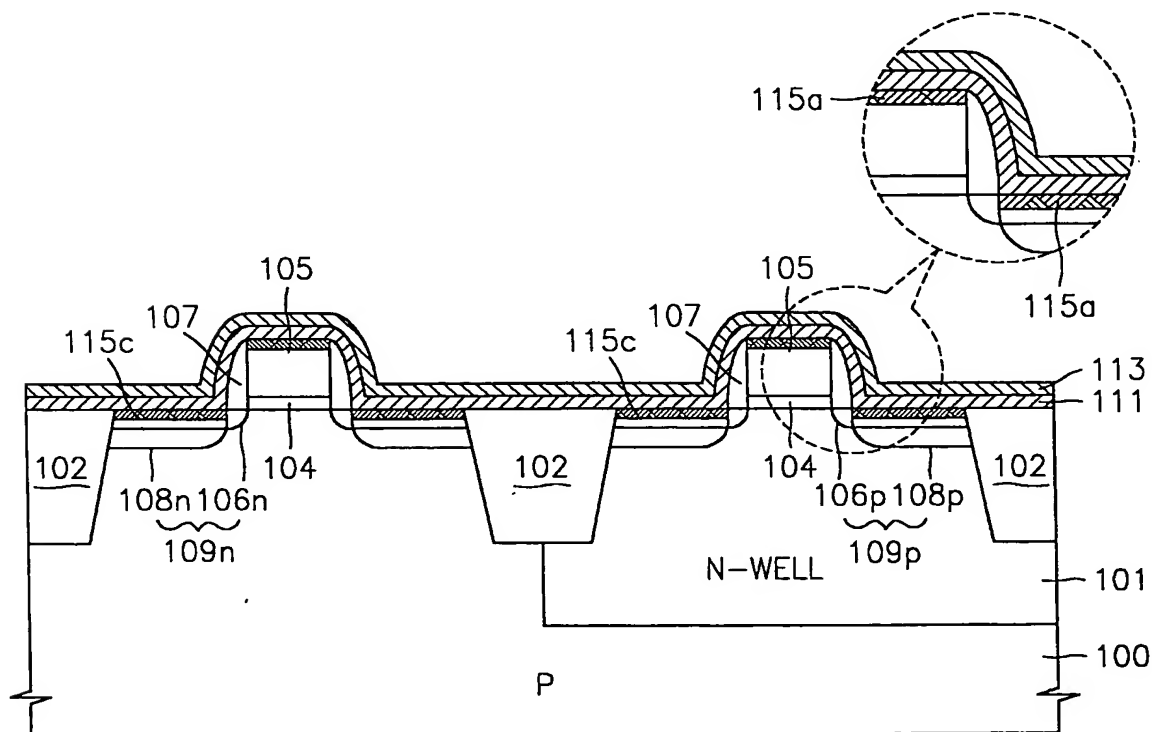


FIG. 6C

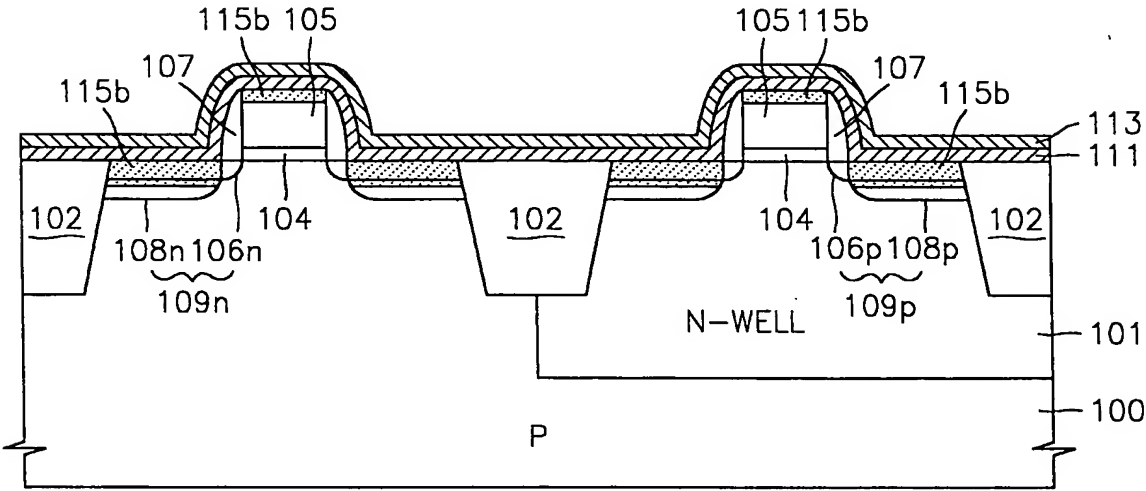


FIG. 6D

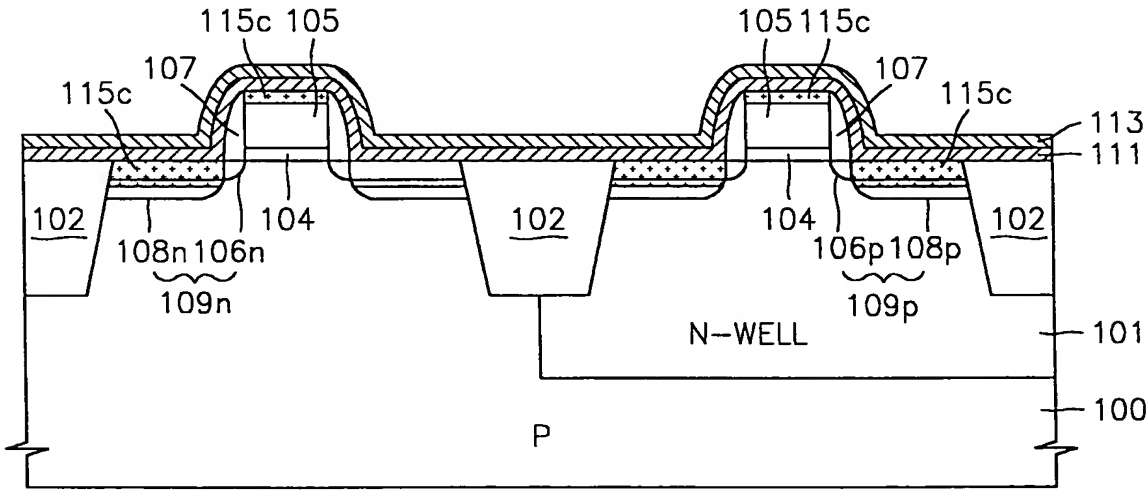


FIG. 7

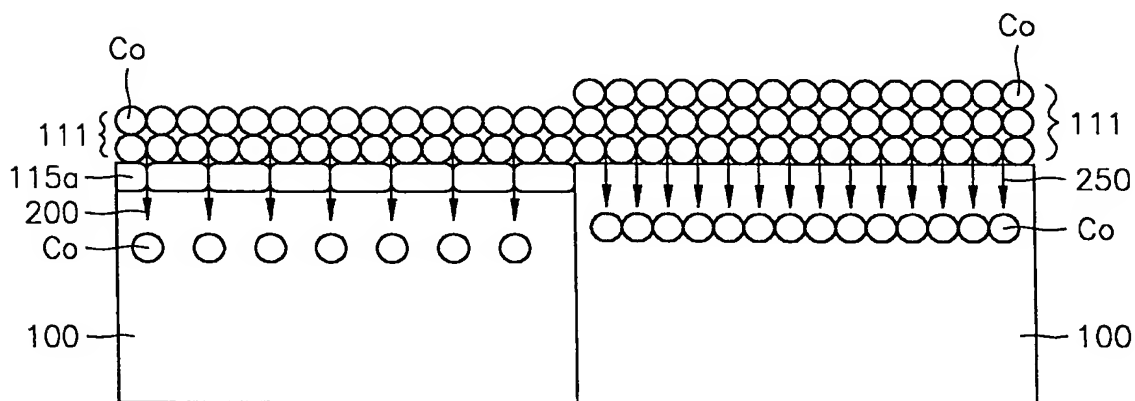


FIG. 8A

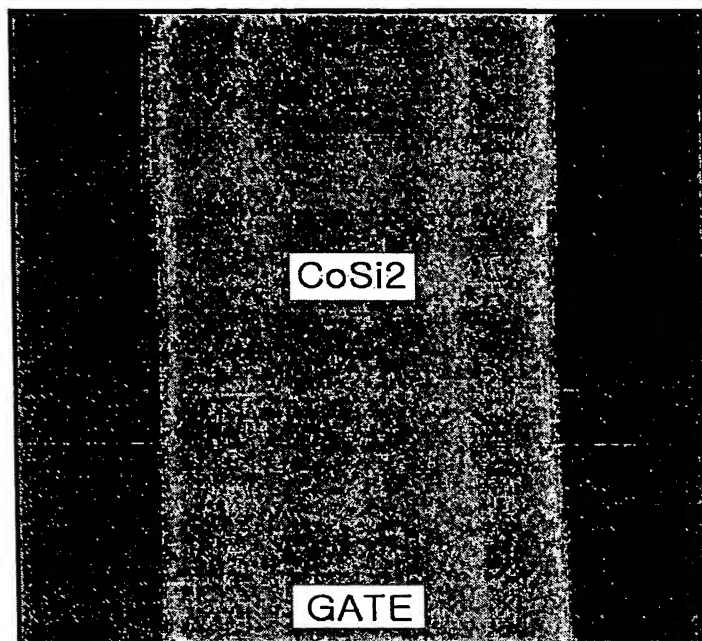
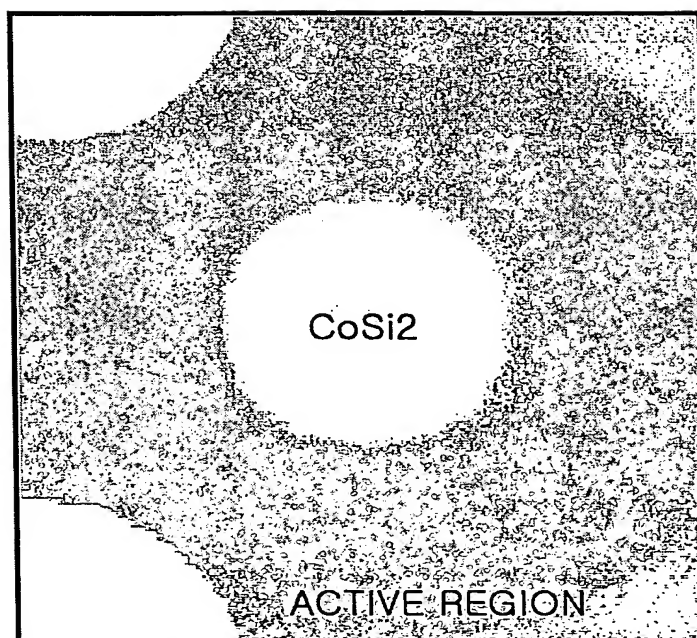


FIG. 8B





9/16

FIG. 9A

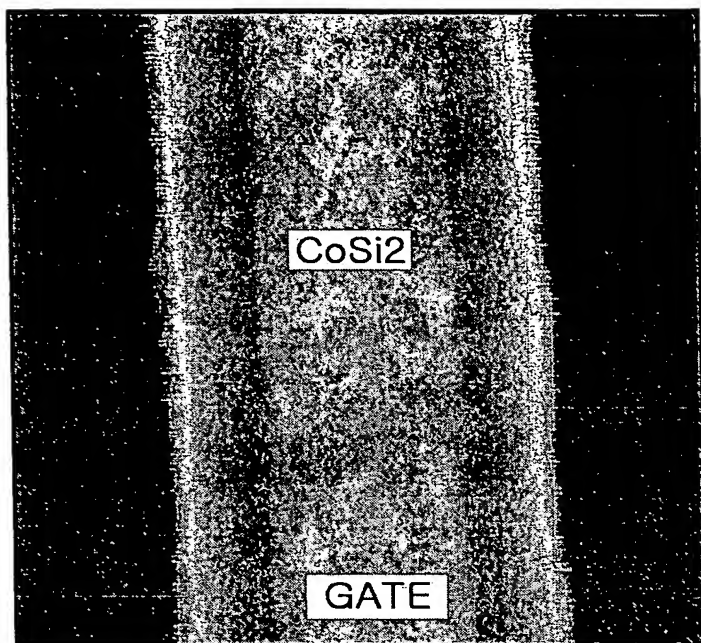
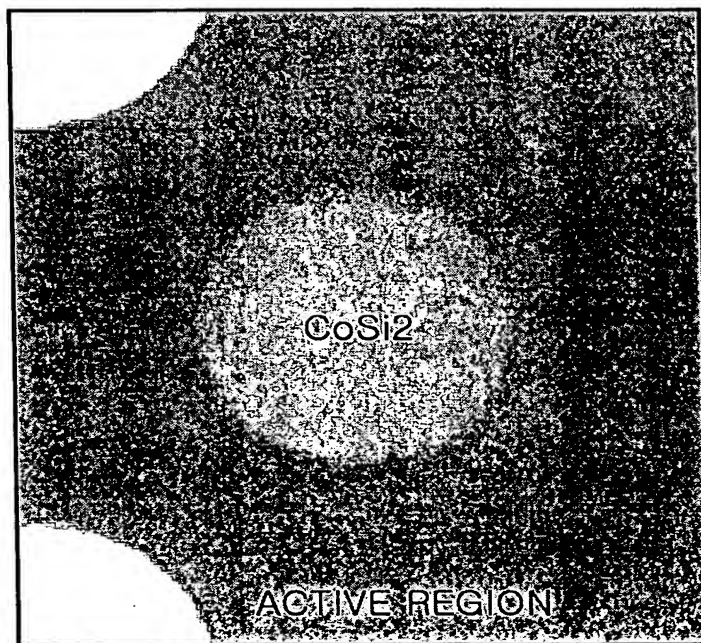


FIG. 9B



10/16

FIG. 10A

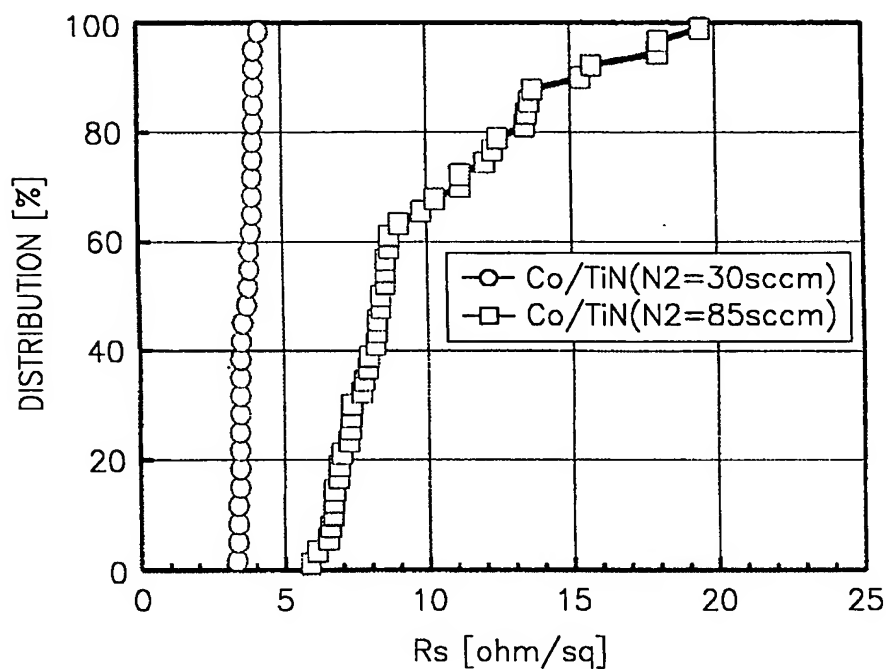
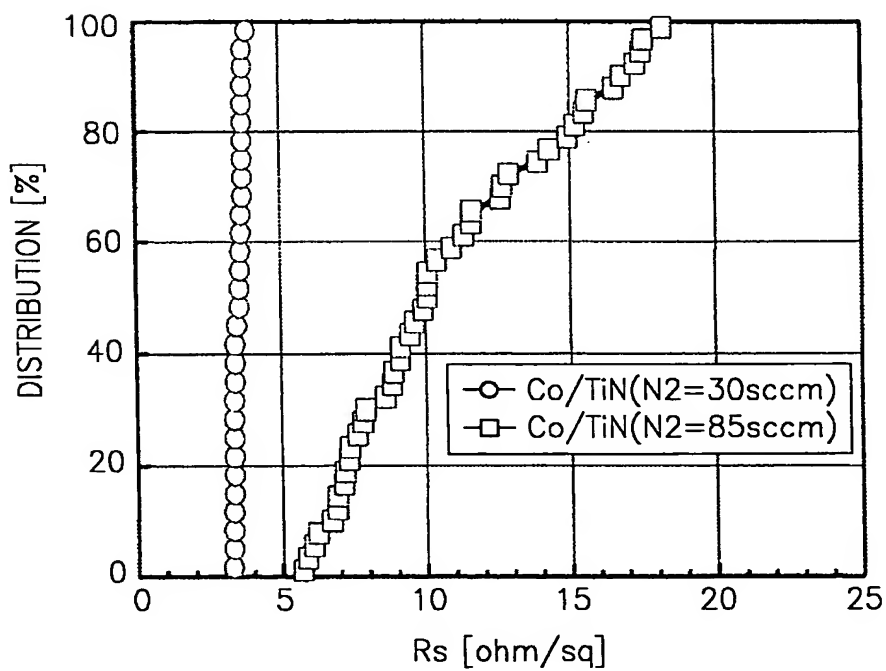
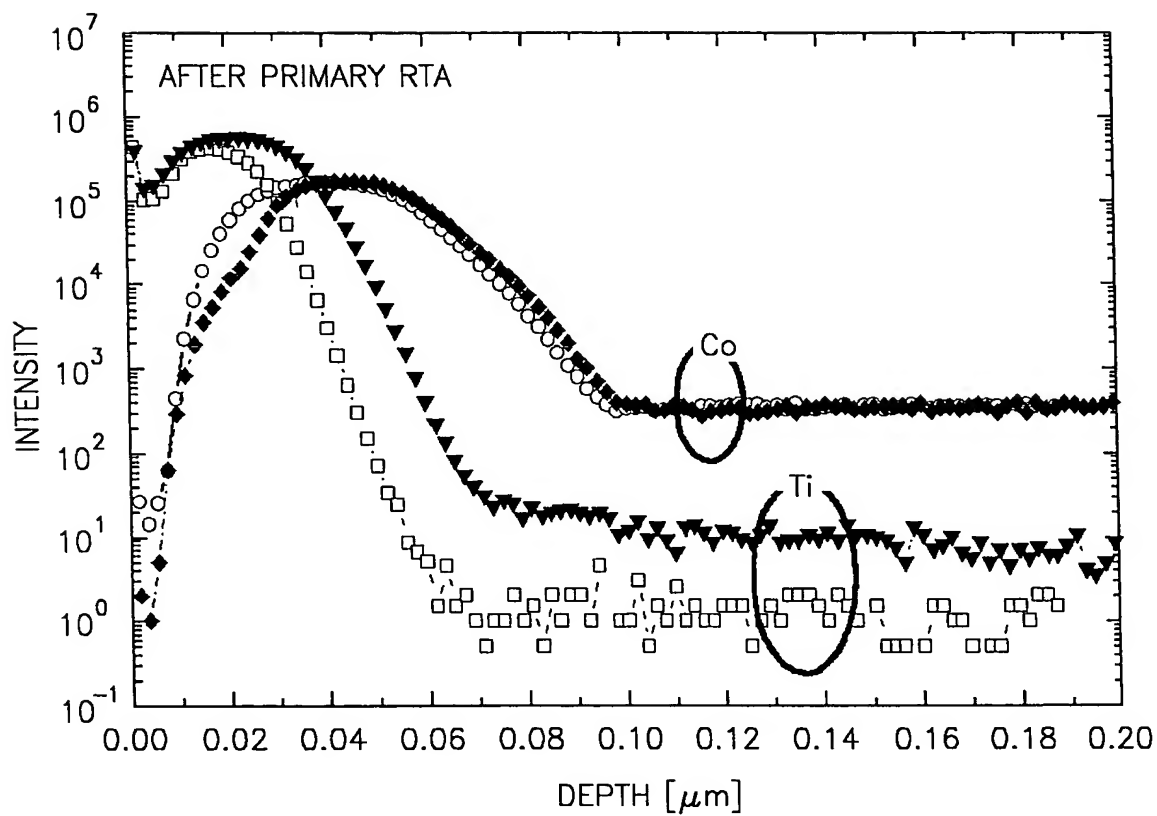


FIG. 10B



11/16

FIG. 11A



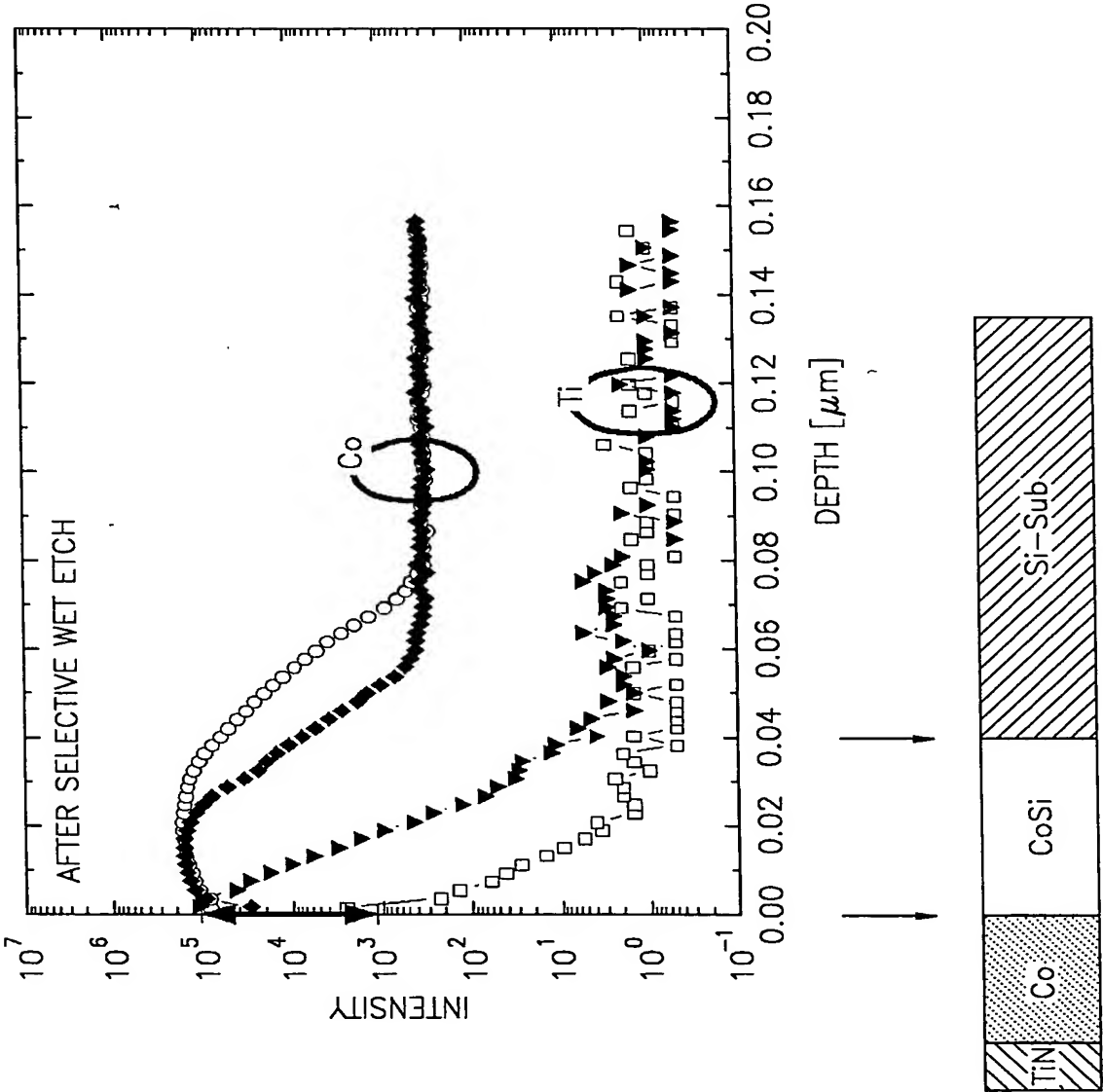


FIG. 12

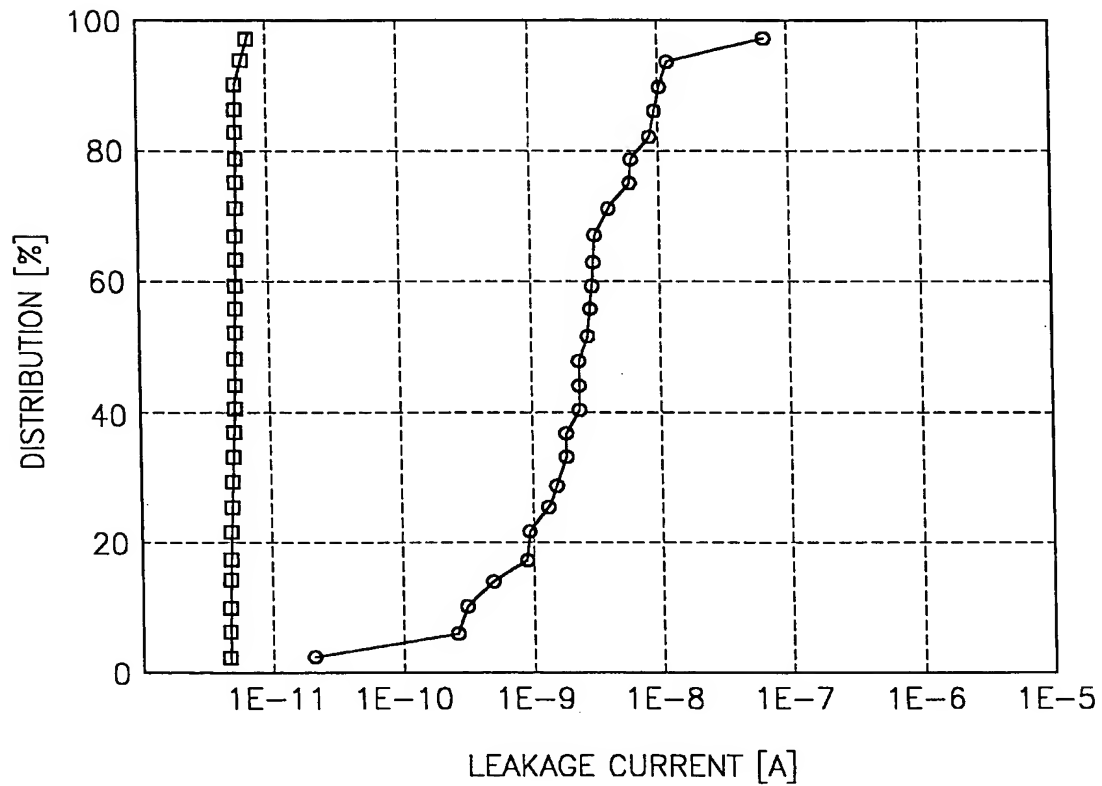


FIG. 13A

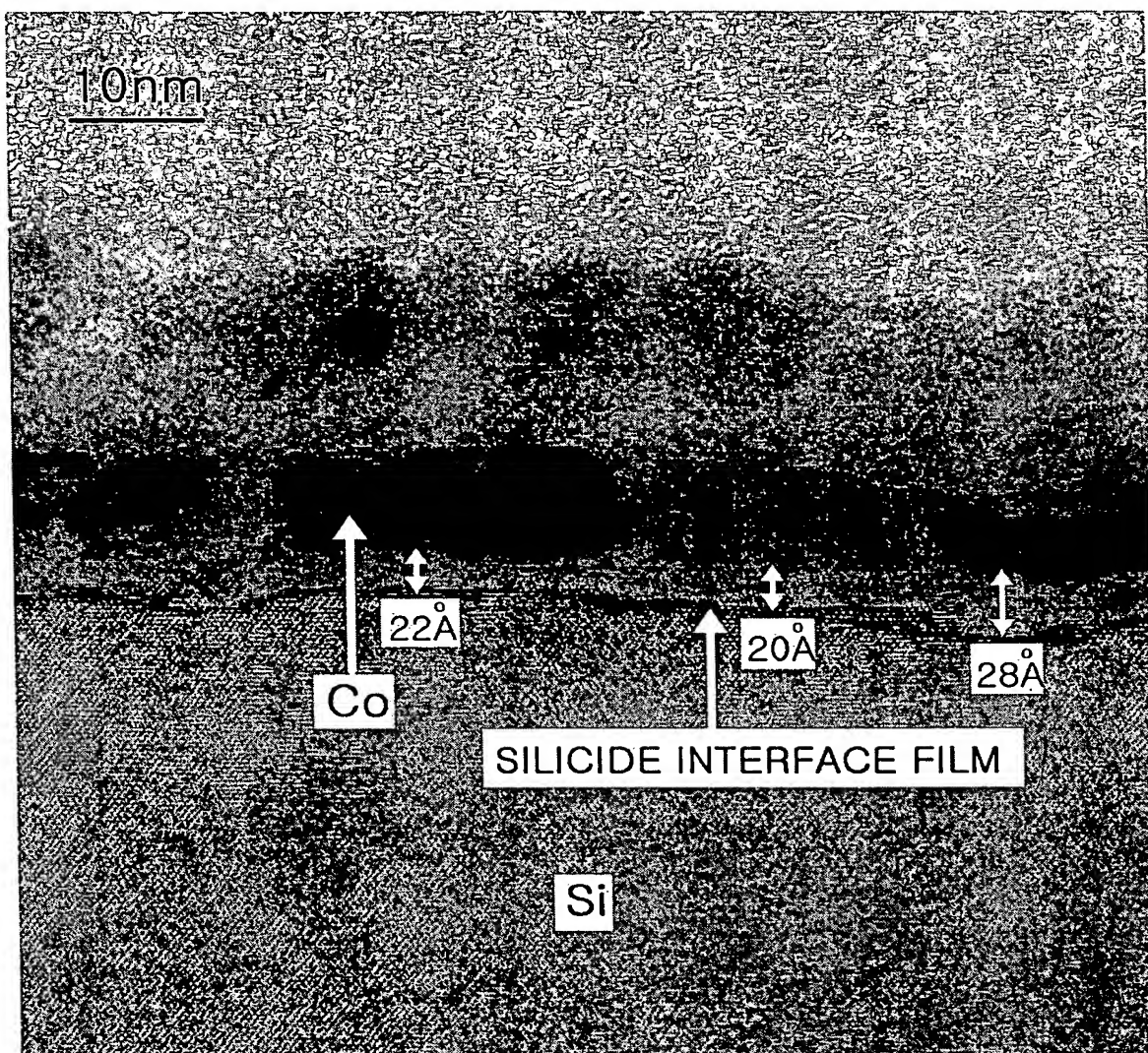


FIG. 13B

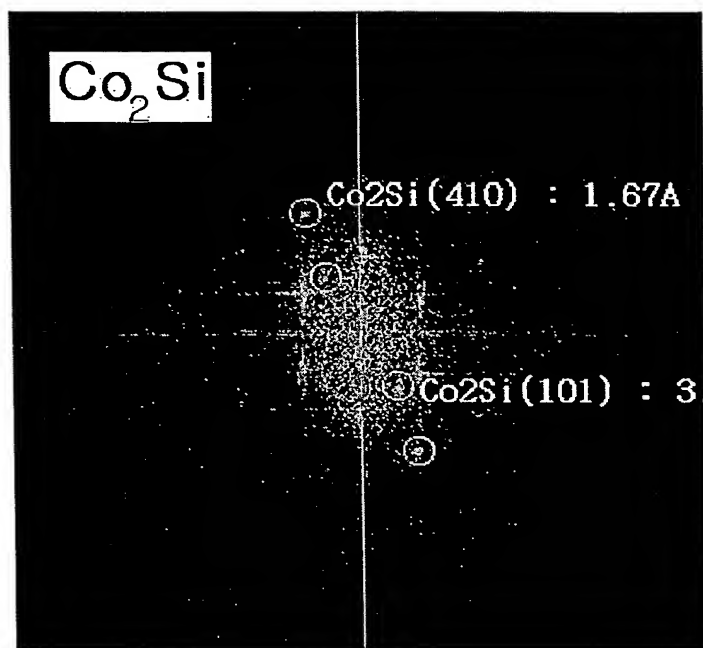


FIG. 13C

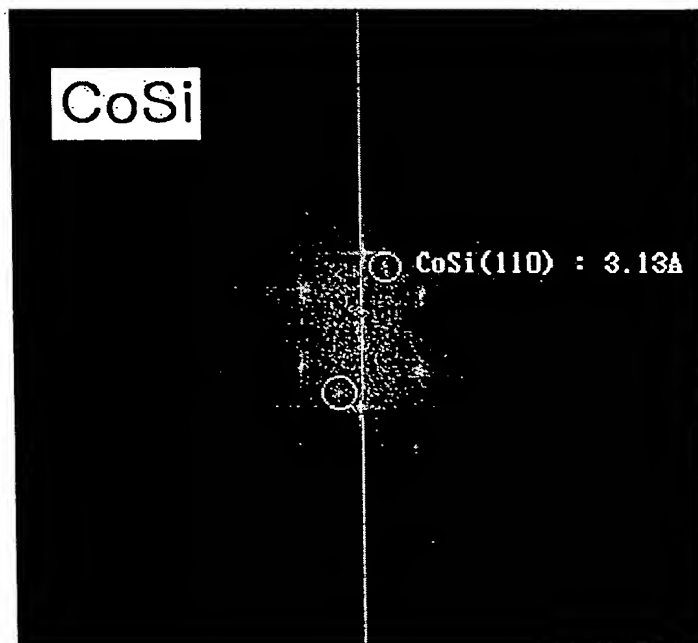


FIG. 14

